

REMARKS

In the Office Action mailed June 24, 2009 the Office noted that claims 44-57 were pending and rejected claims 44-57. Claims 44 and 46 have been amended, no claims have been canceled, and, thus, in view of the foregoing claims 44-57 remain pending for reconsideration which is requested. No new matter has been added. The Office's rejections and objections are traversed below.

ATTORNEY DOCKET NUMBER

The Applicants respectfully request that the attorney docket number to be amended to 0617-1031.

ALLOWABLE SUBJECT MATTER

The Office has indicated that claims 45-51, 54 and 57 would be in a condition for allowance if re-written in independent form and overcome the procedural rejections of the Office. The Applicants thank the Office for the consideration given the claims and submit that the claims are allowable for the reasons discussed below.

OBJECTION TO THE SPECIFICATION

The disclosure stands objected to for informalities. In particular, the Office states that the Abstract does not conform to MPEP § 608.01.

The Applicant submits a replacement Abstract herewith to overcome the objection. The Applicants submit that no new matter is believed to have been added by the amendment of the Specification.

Withdrawal of the objection is respectfully requested.

REJECTIONS under 35 U.S.C. § 112

Claims 44-57 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In particular, the Office asserts that the claims have antecedent basis issues; omits essential steps; and is narrative in nature.

The Applicants have amended the claims to overcome the rejections. The Applicants submit that no new matter has been added by the amendment of the claim.

Withdrawal of the rejection is respectfully requested.

REJECTIONS under 35 U.S.C. § 102

Claims 44, 52, 53, 55 and 56 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Jang, U.S. Patent No. 6,401,002. The Applicants respectfully disagree and traverse the rejection with an argument and amendment.

Jang discusses modeling a 3D object from single-colored elementary triangles.

However, it is also recited that those single-colored elementary triangles are grouped into segment data only if they present the same color and pertain to the same print layer. For example, Jang col. 18, lines 9-10 states "[t]he triangles may be so chosen that each triangle covers one and only one color." Further, Jang col. 18, lines 15-17 states "[n]eighboring data points with the same color code on the same layer may be sorted together. These segment data are then converted into programmed signals."

Thus, the single-colored segments discussed in Jang can not be cut into several print layers and should not be considered as characteristic objects as claimed.

It follows from said analysis that Jang should not disclose the stage consisting in cutting up the multi-material component into characteristic objects as claimed, but only cutting up the multi-material component into several print layers comprising single-colored segments.

Further, Jang fails to teach the stage consisting in "establishing a spatial and temporal sequencing law for a print path for said print layers and for said discrete spatial trajectories as a function of the objects, arranging the objects in a three-dimensional arrangement," as in amended claim 44.

Indeed, as far as the stage consisting in cutting up the multi-material component into characteristic objects is not disclose, a *fortiori*, it can not disclose establishing a sequencing law as a function of said characteristic objects.

In contrast, Jang describes the stage of establishing spatial trajectories successively for each one of the print layers. For example, Jang col. 21, lines 37-40 states "(a) moving the material deposition sub-system and the platform relative to one another in a direction parallel to the X-Y plane to/arm a first layer of the materials on the object platform."

The Applicants acknowledge that Jang discusses a stage of establishing spatial trajectories as a function of the single-colored segments. For example, Jang, col. 22, 28-30 discusses "(e) generating programmed signals corresponding to each of the segments in a predetermined sequence."

The single-colored segments correspond to elementary triangles having a same color and pertaining to the same print layer, not to characteristic objects as claimed.

Therefore, for at least the reasons discussed above, claim 44 and the claims dependent therefrom are not anticipated by Jang.

Withdrawal of the rejection is respectfully requested.

SUMMARY

It is submitted that the claims satisfy the requirements of 35 U.S.C. §§ 112 and 102. It is also submitted that claims 44-47 continue to be allowable. It is further submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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APPENDIX:

The Appendix includes the following item(s):

- ☒ - a new Abstract of the Disclosure